levels. Thus, carriers would be able to meet prescribed utilization thresholds by choosing the optimization method or methods that are most suitable to their situation, including participation in number pooling, or simply returning excess codes. We particularly encourage commenters to address whether and to what extent these alternatives would further the objectives of this proceeding.[361]

217. The principal advantage to this proposal is that it encourages carriers to arrive at their own solutions to the problem of number exhaust rather than requiring the Commission to select and impose regulatory requirements that may prove more burdensome or less beneficial than anticipated. If, over time, certain methods of numbering optimization prove more effective than others, or if certain methods or combinations of methods suit local conditions better than others, a "carrier choice" alternative could give carriers greater flexibility to adopt whatever method works best. This alternative also limits the need for regulatory intervention by the Commission: although the Commission would be responsible for enforcing carriers' utilization obligations, the manner in which carriers fulfilled those obligations would be left largely up to the carriers themselves.

218. Allowing carriers to choose among numbering optimization methods also raises certain issues, however. One potential concern is that carrier choice could reduce the effectiveness of certain numbering optimization methods because fewer carriers would be required to implement them. For example, if carriers with high utilization rates elected not to participate in thousand-block number pooling, they would be unable to draw available thousand-blocks from number pools formed by carriers that have opted to pool because of their low utilization rates. Thus, even though high-utilization carriers would be unlikely to *contribute* numbers to thousand-block number pools in any event, their *drawing* additional numbering resources in the traditional fashion could leave many potential numbers, on an absolute basis, stranded and unavailable for assignment by other carriers. We seek comment on the degree to which carrier choice could reduce the potential effectiveness of certain optimization strategies, particularly thousands-block number pooling.

219. Another potential concern on which we seek comment is how to establish an appropriate utilization rate that is competitively neutral to all participants in the telecommunications marketplace that require numbering resources. We seek comment on what an appropriate rate would be. Setting a relatively high rate applicable to all carriers would presumably create greater incentives for carriers to increase the efficiency of their use

[361] These objectives include ensuring access to numbering resources for all service providers that need them, to prolong the life of the NANP, to minimize the negative impact on consumers, to impose the least cost possible on a competitively neutral basis while yielding the highest benefit, to ensure that no class of carrier or customer is unduly favored or disfavored, and to minimize incentives for warehousing or hoarding of numbers. *See supra* ¶ 6.

of numbering resources, and would likely lead to broader participation in number pooling, including participation by carriers that have already achieved comparatively high utilization rates. On the other hand, setting a uniform rate at too high a level, particularly at the outset, could impose undue burdens on carriers and limit the flexibility of carriers to choose numbering optimization methods that are most suitable to their particular circumstances. This is particularly true of competitive LECs (CLECs), which typically have low utilization rates given their nascency in the marketplace compared to the more established ILECs.

220. One way to balance these considerations might be to start with a utilization rate that is reasonably consistent with current levels of usage and adjust it upward over time. This would give carriers more flexibility to plan their strategies for using numbering resources more efficiently, and to increase their efficiency on a gradual basis. Another possibility might be to establish differing utilization rates for different classes of carriers. We question, however, whether such a system would be competitively neutral. Therefore, we seek comment on whether a utilization rate should apply across the board, or whether different rates could be set depending on the class of carrier. If we mandate a uniform utilization rate that imposes a disparate impact on different types of carriers, we seek comment on whether this system would be competitively neutral. Alternatively, we seek comments on whether mandating different utilization rates for different classes of carriers would be competitively neutral. Finally, we invite comment on the feasibility of equalizing utilization rates among the various classes of carriers if those rates start out at different thresholds.

221. We seek comment on the implementation of this approach, including how to determine an appropriate initial utilization rate and how quickly the rate should rise over time. Because gathering baseline data on current utilization rates is critical to the success of this proposal, we also seek comment on how quickly this proposal could be implemented, how quickly we could reasonably expect carriers with low utilization rates to meet successively higher thresholds, and how the timetable for such increases would affect their likely choices of numbering optimization methods. We also seek comment on the penalties for operating in an area without having achieved a threshold fill rate.[362]

222. Another variable to consider as part of the carrier choice alternative is the relevant area in which utilization rates would apply and the geographic basis on which they would be calculated. We seek comment on whether utilization rates should be based on individual NXXs, rate centers, NPAs, states, or the entire region or regions served by a service provider. One advantage of setting a larger area is that it encourages high levels of number utilization across many different boundaries. Another is that it may encourage rate center consolidation. Setting a smaller area as the relevant region, however, may be more feasible for carriers serving vastly different regions, and could also take into account

[362] *See supra* Section IV.F.

differences between regions, such as the number of competing carriers in an area and the number of rate centers in an area. In addition, we seek comment on whether utilization rates should vary based on the likely overall demand for numbers. For example, a lower utilization rate -- or no requirement at all -- may be appropriate in less densely populated areas of the country where demand for numbers is not high and area code relief may not required for years. Similarly, in areas where there are few competing carriers that require numbering resources, there might be no useful purpose to establishing utilization thresholds even under a carrier choice regime. Thus, we seek comment on how to adapt the carrier choice alternative to variable local market conditions.

223. We recognize that the carrier choice alternative may serve as a substitute for some of the other optimization measures outlined above, and also as a supplement to other measures. For example, it appears that for the carrier choice plan to function effectively, certain measures, like the reporting and utilization thresholds outlined above, would need to be put in place prior to implementing carrier choice.[363] Other numbering optimization measures, such as pooling, may be substituted, however, by the carrier choice plan. That is, while carrier choice requires threshold fill levels be met, it does not necessarily result in a mandate of thousands-block pooling for all carriers. We seek comment on what measures outlined above would be a predicate for enacting a carrier choice regime. We also seek comment on the impact that adopting a carrier choice alternative would have on cost recovery for numbering resource optimization, as discussed in Sections IV.H and V.D.3.

224. Finally, we seek comment on the role of the Commission and state authorities if this alternative were adopted. Because this approach would largely leave number optimization solutions up to individual carriers, regulation of numbering at both the state and federal level would presumably be less intrusive than if these solutions were imposed on a mandatory basis. Nevertheless, we must still consider the respective roles of federal and state authority in implementing this alternative. We seek comment on whether carrier choice should be governed by federal standards or whether we should delegate authority to the states to establish utilization rates and timetables that would apply to carriers under their jurisdiction. We also seek comment on the respective roles that this Commission and the states should play in sanctioning carriers that do not achieve the requisite utilization rates.

VI. PRICING OPTIONS

225. An alternative approach for improving the allocation and utilization of numbering resources would be to require carriers to pay for the numbering resources that they request or receive. This approach could be used in isolation or in combination with the administrative and numbering optimization approaches discussed in previous sections. Below,

[363] *See supra* Sections IV.C and IV.D.

we seek comment on both the theoretical and practical issues related to using pricing to allocate optimally numbering resources.

226. Unlike most other resources used by the telecommunications industry, numbering resources are administratively allocated rather than sold -- that is, they are priced at zero. The poor utilization of numbering resources that we have experienced in recent years may be in part due to administrative allocation rules that fail to recognize the economic value of numbers.[364] If a pricing mechanism for allocating numbering resources were instituted, carriers would likely seek ways of using numbers more efficiently. We recognize that, in the short term, it is probably not feasible to replace our existing numbering allocation mechanism with a pricing allocation mechanism, but we nonetheless believe it is important to consider price-based mechanisms as a possible long-term alternative to administrative numbering allocation and as a supplement to or substitute for mandatory numbering optimization measures such as pooling and rate center consolidation.

227. As a matter of business and economics, telecommunications carriers request NXX codes when they expect the incremental benefits of having an additional code to exceed the cost of acquiring that code. At the current price of zero, even inconsequential benefits can justify a request for an additional NXX code. Moreover, carriers have little incentive to seek ways of improving the utilization of their current pool of numbers. Changing the method of allocating numbers from one that relies on administrative rules to one that is price-based can provide needed incentives to foster the efficient utilization of numbers. As the cost of holding numbering resources increases, carriers will seek ways of reducing their numbering resource costs. For example, they may look for ways of increasing the utilization of existing stocks of numbers by engaging in number pooling and other optimization measures. These activities will decrease the demand for new NPAs and extend the life of the NANP. In areas where numbering resources are being rationed, i.e., NPAs that are in jeopardy, a pricing system could ensure that remaining numbering resources are allocated to those carriers and end users that need and value them the most.

228. We seek comment, generally, on the legal issues involved in establishing a pricing mechanism for numbering resources. Section 251(e)(2) of the Act provides that the

[364] The inefficiency of the existing numbering resource allocation approach can be seen by looking at current utilization rates. At the end of 1998, 207 geographic area codes had been assigned for use within the U.S. by the NANPA. *See* Number Utilization Study at 4. Each area code has 792 NXX codes that are assignable to carriers and each NXX code has 10,000 numbers that can be assigned to end users. Thus, at the end of 1998, the 207 geographic area codes assigned in the United States yielded 163,944 available NXX codes. 96,168 of these NXX codes had been assigned by the end of 1998. *Id.* at 7. Within these assigned NXX codes, there are 961,680,000 available individual telephone numbers. According to data provided by the NANPA, approximate 34% of available numbers (328.3 million telephone numbers out of 961.68 million) are assigned. *Id.* at 7.

costs of numbering administration arrangements and number portability shall be borne by carriers on a competitively neutral basis as determined by the Commission.[365] We seek comment on whether this delegation of statutory authority to the Commission is sufficiently broad to allow us to establish a pricing mechanism that would be based on the market value of numbering resources to carriers, or whether its scope is limited to recovery of administrative costs related to numbering administration. We also seek comment on whether we have general authority to establish price-based mechanisms for number allocation based on our plenary jurisdiction over numbering issues in the United States under section 251(e)(1) of the Act.[366] In the alternative, if necessary, should we seek such authority?

229. Assuming that we have statutory authority to establish a pricing mechanism for numbering resources, we seek comment on whether there are any public policy reasons not to do so. For example, could we achieve increased efficiency in numbering usage through refinements and reform of existing administrative allocation mechanisms? In particular, we seek comment on arguments that have been raised against using prices to allocate numbering resources. One such argument is that numbers are a public resource that can not be owned, and that establishing a pricing mechanism would turn numbers into a private commodity. We agree that numbers are a public resource, although this is not necessarily an argument against requiring payment for their use, much as payments are required for other public resources, including radio spectrum and public lands. Consequently, the charges we envision for numbering resources would be more akin to license or rental arrangements rather than outright ownership of numbers. We seek comment on whether a license-type arrangement would be consistent with our long-held view that numbers are a public resource. If we were to permit a charge for numbering resources, should such a charge be monthly, annual, or multi-year? We also seek comment on whether a two-tier pricing system would be preferable. Under a two-tier pricing system we envision a flat charge and variable charge for every NXX code. The purpose of the flat charge would be to discourage carriers from requesting more numbers than they need. Without such a charge, carriers may have the expectation that they could return excess numbers to the NANPA without incurring material costs. We seek comment on these observations.

230. Another consideration in determining whether to establish prices for numbers is that the added cost and administrative burden to carriers may inhibit competitive entry if it imposes a disproportionate burden on new entrants. We recognize that requiring carriers to pay for numbers would impose costs on all carriers, but seek comment on whether these costs might pose a particular challenge for new entrants that require numbering resources simply to establish a presence in a market. To assess this burden fairly, however, one must compare it

[365] 47 U.S.C. § 251(e)(2).

[366] 47 U.S.C. § 251(e)(1).

to the societal costs imposed on carriers and subscribers by the current allocation system, including the potential impact on competitive entry in markets that are facing or will soon face numbering exhaust. We believe that, even if some carriers will have more difficulty than others paying a market-based price for numbers, this outcome does not necessarily mean that the use of a pricing mechanism will be discriminatory or anti-competitive. To the contrary, so long as there are no distortions in the market, the pricing of numbering resources should be competitively neutral. In addition, pricing numbering resources may actually aid competitive entry by discouraging carriers from amassing excessively large inventories of numbers, thereby ensuring that an adequate supply of numbering resources is available to all service providers. We seek comment on these issues, and on what measures would be needed to ensure competitive neutrality in using a pricing mechanism to allocate numbering resources.

231. We also seek comment on the possible components of a pricing mechanism for allocating numbers. There appear to be two basic approaches for setting a "price" for numbering resources: administratively determined pricing and market-based pricing. An administratively determined pricing system could, for example, be based on a traditional cost-based pricing mechanism, where the "price" of numbering resources would be limited to levels that are required to recover industry related numbering costs. Alternatively, it could be based on total societal costs. A market-based mechanism, on the other hand, permits prices to be determined by both the supply and demand for numbering resources. As discussed in more detail below, the rate of increase in the supply of numbers, for example, could be set based on achieving a prescribed life for each NPA and the market could then be permitted to determine the price for each NXX code.[367] Depending on market conditions, such market-based prices can be higher or lower than they would be under an administratively determined pricing system.

232. With respect to administratively determined pricing approaches, a traditional cost-based pricing mechanism would focus on the costs incurred by the telecommunications industry in rolling out numbering resources, including costs associated with reprogramming switches and purchasing new equipment. Prices based on cost recovery, however, exclude any consideration of the costs imposed on the rest of society when new numbers are rolled out. These costs range from those associated with changing business cards and stationery to those associated with NANP exhaust.[368] Since the societal cost of numbering exhaust should exceed the direct industry costs of activating individual NPAs, pricing based on traditional

[367] *See* Martin L. Weitzman, *Prices* vs. *Quantities*, 44 (4) REV. ECON. STUD. 477 (1974).

[368] *See* discussion *supra* Section III.

cost recovery may result in too low a price to encourage efficient conservation of numbers.[369] For this reason, we believe that a more expansive definition of cost must be used if we were to adopt an administratively determined pricing mechanism. Our view is supported by the NANC, which has stated that the goal of national numbering optimization policy should be to minimize total societal costs and impacts.[370] We seek comment on the relative advantages and disadvantages of using an administratively determined pricing mechanism for numbering resources. More specifically, we seek comment on the types of costs that should be recovered. For example, commenters should address whether prices for numbers should be set to recover the cost of implementing a new NPA or the cost of expanding the NANP, as well as how these types of costs can best be estimated. We also seek comment on whether a traditional cost-based system can yield prices that are sufficient to encourage carriers to utilize numbers efficiently and what should be done if there is more demand for numbering resources than there is available supply at the administratively set price.

233. Under a market-based approach, on the other hand, prices could be set by an auction-like process in each market and would vary from one time period to another and from one market to another depending on the supply and demand conditions in each market. We seek comment generally on how such a market-based pricing mechanism could be structured and implemented. We also seek comment on whether a market-based pricing mechanism can be designed to reflect fully the total private and societal cost of numbering resources. As we indicated above, the costs associated with numbering exhaust in a particular NPA extend beyond the costs incurred by industry, end users, and state commissions in that specific location. Because there are a finite number of area codes in the ten-digit NANP, each area code that is activated leaves one less that could be used in another part of the country, or in the other countries that participate in the NANP. Thus, a properly designed market-based pricing mechanism should take into account all societal costs, including the cost of NANP exhaust.

234. We believe one way of recognizing and addressing the societal cost of eventual NANP exhaust would be to prescribe a life for NPAs and to release NXX codes at a rate that

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[369] Because numbering resources are a shared finite resource, the societal cost (cost to all users of the NANP) of activating a new NPA will exceed the costs incurred by the carriers and subscribers in the region that implements it. Specifically, the direct costs exclude any consideration of the cost of expanding the NANP. When societal costs exceed direct costs, implementation of a price-based allocation system must include a mechanism that includes societal costs that are external to the directly affected parties. These external costs are commonly called externalities.

[370] *See, e.g.*, NRO Working Group Mission Statement, attachment to letter from Alan Hasselwander, NANC Chairman, to Kathryn C. Brown, Chief, Common Carrier Bureau, dated September 23, 1998.

corresponds to this life. The price of NXX codes could be increased to reflect higher societal costs by lengthening the expected lives of NPAs or could be reduced to reflect lower societal costs by shortening prescribed lives. We request comment on whether controlling the release of NXX codes in each market provides a reasonable mechanism for reflecting all relevant societal costs associated with numbering resource use. Commenters are asked to identify other approaches that could be used to ensure that a market-based pricing system reflected the full societal cost of numbering resources.

235. By permitting the price of numbering resources to float depending on the relative supply and demand for numbers in each market, carriers will have an incentive to use newly activated numbers, as well as previously assigned numbers efficiently. We seek comment on the types of procedures and safeguards that would have to be employed for a market mechanism to operate efficiently and in a non-discriminatory manner. For example, how could we prevent the price of NXX codes from fluctuating widely from month to month in the same market or rising to levels that might discourage competitive entry? We also seek comment on whether and how previously assigned numbers should be priced. Efficiency would require that all numbers, whether previously assigned or currently available for assignment, reflect their current market value. Otherwise, there will be little incentive for carriers to improve their utilization of existing stocks of numbers. Moreover, incumbent carriers would have a distinct competitive advantage over new entrants if they had large stocks of numbers for which they did not have to pay the current market price. We also seek comment on whether a secondary market for numbers should be permitted. We believe that this would facilitate improved use of existing stocks of numbers and would facilitate the most efficient use for all numbers.

236. In spite of the differences between administratively determined and market-based pricing mechanisms, implementation of both must begin with a proper definition of the geographic area(s) in which the prices will apply. For an administratively determined pricing system, the geographic area will be determined by a definition of which costs will be reflected in the price for numbers. In a market-based pricing system, the area in which carriers compete for available numbering resources can be used to define a single market. Commenters are requested to address the above distinction and provide suggestions on how geographic areas under each mechanism should be defined. Our initial impression is that the area covered by each NPA represents a separate geographic area under both mechanisms. We note that NXX codes can be located anywhere within the NPA from which they are assigned but cannot be moved between NPAs. Thus, NXX codes in different NPAs logically could have different prices because they have different cost and demand characteristics. NXX codes in Wyoming, for example, can be expected to have a different price than NXX codes from a New York City or Long Island area code. Alternatively, the geographic area could be defined

as broadly as the nation or as narrowly as a rate center. We seek comment on the appropriate geographic area for administratively determined or market-based pricing mechanisms and whether this market should be defined broadly or narrowly.

237. If we were to adopt either an administratively determined or a market-based pricing mechanism, we seek comment on what should be done with revenues generated by this type of allocation system. One possibility would be to use the funds primarily to offset all costs associated with numbering such as administration, pooling, and rate center consolidation. With respect to rate center consolidation, revenues could be used to cover all transitional costs incurred by local exchange carriers, subscribers, Public Safety Answering Point service providers, and others. Another possibility is that we could substitute numbering revenues for other funds used to finance existing telecommunications programs. It is possible, however, that Congress will require all funds that are collected to be turned over to the U.S. Treasury.

238. We recognize that adopting an administratively determined or market-based allocation mechanism for numbering resources raises significant transitional issues that could adversely impact some carriers early on. Specifically, carriers would have to review their numbering use practices and adjust them to take into account an explicit cost for these resources. If we were to adopt such a mechanism, we seek comment on what a feasible time frame for implementing it would be, and whether this decision should affect our thinking about number optimization methods discussed elsewhere in this Notice that could be implemented in the interim. We believe that gradual implementation of a price-based allocation mechanism would be preferable to a flash-cut change because this would allow carriers time to make necessary changes in institutional arrangements and/or implement procedures that encourage efficient numbering resource use.

239. Therefore, we seek comment on what types of transitional pricing mechanisms and transitional safeguards could be used during a gradual implementation of either an administratively set or market-based pricing mechanism. For an administratively set pricing mechanism, we could establish a low initial price designed to recover a specified portion of costs and over time gradually increase that price to recover all relevant costs. For a market-based pricing system, we could set an initial price cap at the average cost of activating a new NPA in the existing NANP. That cap could be gradually increased until it approximated the average cost of activating a new NPA in an expanded NANP. We also seek comment on how long such caps should be kept in place. One possibility is to permanently retain a cap based on the long run average cost of activating a new NPA in an expanded NANP. Alternatively, we could gradually move away from any cap. We seek comment on the use of a cap to limit prices during the transition, how we should set the cap, and whether the cap should be permanent. One of the problems with setting a cap is that if it is set too low, demand for numbers may exceed supply at the capped price and administrative allocation

controls such as rationing will be also required. We seek comment on the procedures we might adopt to address or avoid those situations.

240. Finally, we have previously suggested that synergies exist between establishing a price for numbers and number conservation measures. We seek comment on the potential synergies between a price-based allocation system for numbers and certain of the other number optimization measures discussed in this Notice. We believe that charging for the use of numbers would improve the effectiveness of several of the mechanisms contained in this Notice and that optimization measures such as number pooling and rate center consolidation, in turn, would make a price-based allocation system more effective. For example, pooling would reduce the size of the number blocks that a carrier would need to acquire in order to establish a service footprint, thereby making the numbers more affordable to small or new entrants and promoting competition. We request commenters to indicate which of the other numbering resource optimization measures discussed in this Notice would work in conjunction with a pricing mechanism. Commenters should also address whether the economic incentives provided by pricing numbering resources would be sufficient to encourage the industry to undertake these optimization measures on their own or whether at some level, regulatory authorities would still have to mandate the implementation and enforcement of such measures.

VII. AREA CODE RELIEF

A. Introduction

241. In Sections IV, V and VI above, we have sought comment on various numbering optimization methods that focus on conservation of numbering resources within each area code that is activated for use. By maximizing efficient use of numbers within area codes, we reduce the need to introduce new area codes, which can help prevent premature exhaust of the existing NANP. We recognize, however, that the adoption of any of these numbering resource optimization measures does not eliminate the need for states to continue to implement area code relief in those area codes that are approaching depletion. As discussed in Section III.A above, the rapid increase in area code consumption throughout the country may lead to the creation of approximately 68 new area codes by the year 2000 through the implementation of geographic splits and overlays.[371] In this section, we seek comment on what action the Commission can take to assist states in implementing area code relief in a manner that is consistent with any other numbering resource optimization measures that we may adopt in this proceeding.

[371] *See* Number Utilization Study at 5.

B. Background

242. As outlined in Section III.A., state commissions have the authority to implement appropriate forms of area code relief, as delegated by the Commission in the *Local Competition Second Report and Order*.[372] Under Section 52.19 of the Commission's rules,[373] states can introduce new area codes through the use of: (1) an area code overlay, which occurs when a new area code is introduced to serve the same geographic area as an existing area code; (2) a geographic split, which occurs when the geographic area served by an area code is split into two or more geographic parts and one part maintains the old area code and one (or more) receive a new area code; or (3) an area code boundary realignment, which occurs when the boundary lines between two adjacent area codes are shifted to allow unassigned NXX codes in one area code to be used in another area code for which few or no NXX codes are left for assignment.

243. In the *Local Competition Second Report and Order*, the Commission emphasized that its delegation of authority to the states for implementing area code relief is subject to the Commission's guidelines for numbering administration.[374] The Commission reiterated the guidelines that it had set forth in a declaratory ruling on Ameritech's area code relief plan for Chicago ("*Ameritech Order*"),[375] stating that numbering administration should: (1) seek to facilitate entry into the communications marketplace by making numbering resources available on an efficient and timely basis; (2) not unduly favor or disadvantage a particular industry segment or group of consumers; and (3) not unduly favor one technology over another.[376] The Commission also clarified its numbering administration guidelines with respect to how area code overlays can be lawfully implemented. First, the Commission prohibited all service-specific or technology-specific overlays because it found that such overlay plans would be unreasonably discriminatory and would unduly inhibit competition.[377]

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[372] *Local Competition Second Report and Order*, 11 FCC Rcd at 19512.

[373] 47 C.F.R. § 52.19.

[374] *Local Competition Second Report and Order*, 11 FCC Rcd at 19512.

[375] *See* Proposed 708 Relief Plan and 630 Numbering Plan Area Code by Ameritech - Illinois, *Declaratory Ruling and Order*, 10 FCC Rcd 4596 (1995) (*Ameritech Order*). In the *Ameritech Order*, the Commission concluded that Ameritech's proposed wireless-only overlay plan would be unreasonably discriminatory and anticompetitive in violation of Sections 201(b) and 202(a) of the Act, 47 U.S.C. §§ 201(b), 202(a).

[376] *Local Competition Second Report and Order*, 11 FCC Rcd at 19516-17, as codified in the Commission's rules, 47 C.F.R. § 52.9(a).

[377] *Local Competition Second Report and Order*, 11 FCC Rcd at 19518.

Second, the Commission concluded that, if a state commission chooses to implement an all-services area code overlay, the all-services overlay plan must include: (1) mandatory ten-digit local dialing by all customers between and within area codes in the area covered by the new code; and (2) availability to every existing telecommunications carrier, including CMRS providers, authorized to provide telephone exchange service, exchange access, or paging service in the affected area code 90 days before the introduction of a new overlay area code, of at least one NXX in the existing area code, to be assigned during the 90-day period preceding the introduction of the overlay.[378] The Commission stated that imposing these conditions on the implementation of all-services overlay plans would ensure that competitors, including small entities, do not suffer competitive disadvantages.[379]

244. In the *Local Competition Second Report and Order*, the Commission stated that if a state acts inconsistently with federal numbering guidelines designed to ensure the fair and timely availability of numbering resources to all telecommunications carriers, parties wishing to dispute a proposed area code plan may file a petition for declaratory ruling, rulemaking, or other appropriate action with the Commission.[380] In a subsequent order in CC Docket 96-98, the Commission granted in part a petition for declaratory ruling challenging an area code relief plan of the Pennsylvania Public Utility Commission, ruling that certain of the actions mandated in the plan exceeded the scope of authority that the FCC had delegated to state commissions and unduly disfavored carriers that could not participate in certain of the measures ordered.[381] The Commission, however, elected to delegate additional authority to state commissions to order NXX code rationing in conjunction with area code relief decisions, in the absence of industry consensus on a rationing plan.[382] In addition, the Commission encouraged state commissions to seek further limited delegations of authority to implement other innovative number conservation methods.[383]

245. The Connecticut Department of Public Utility Control ("Connecticut Commission"), the Massachusetts Department of Telecommunications and Energy

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[378] *Local Competition Second Report and Order*, 11 FCC Rcd at 19518.

[379] *Local Competition Second Report and Order*, 11 FCC Rcd at 19518-19.

[380] *Local Competition Second Report and Order*, 11 FCC Rcd at 19520.

[381] *Pennsylvania Numbering Order*, 13 FCC Rcd at 19031, 19035-37.

[382] *Pennsylvania Numbering Order*, 13 FCC Rcd at 19025-26. The Commission specified that state commissions may exercise such additional authority if they have decided on a specific form of area code relief and established an implementation date. *See* 47 C.F.R. § 52.19(a).

[383] *Pennsylvania Numbering Order*, 13 FCC Rcd at 19009, 19030.

("Massachusetts Commission"), and the California Public Utilities Commission and the People of the State of California ("California Commission") have filed petitions to amend or waive the Commission's rules prohibiting technology-specific or service-specific overlays so that they can implement such overlays.[384] In addition, the Florida Public Service Commission ("Florida Commission"), the Maine Public Utilities Commission ("Maine Commission"), the Massachusetts Commission, the New York Department of Public Service ("New York Commission"), and the California Commission have requested additional delegated authority to implement other number conservation methods such as thousands-block pooling.[385]

C. Discussion

246. As discussed in Section VII.A above, the Commission has delegated authority to the states to implement area code relief measures, subject to the Commission's numbering administration guidelines. In general, numbering administration should promote entry into the communications marketplace by making numbering resources available on an efficient and timely basis, should not unduly favor or disadvantage a particular industry segment or group

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[384] *See* Connecticut Department of Public Utility Control Files Petition for Rulemaking, Public Comment Invited, *Public Notice*, RM No. 9258 (rel. 1998) (Connecticut Petition); Common Carrier Bureau Seeks Comment on Massachusetts Department of Telecommunications and Energy Petition for Waiver to Implement a Technology-Specific Overlay in the 508, 617, 781, and 978 Area Codes, *Public Notice*, DA 99-460, (rel. March 4, 1999) (Massachusetts Petition); Common Carrier Bureau Seeks Comment on a Petition of the California Public Utilities Commission and the People of the State of California for a Waiver to Implement a Technology-Specific or Service-Specific Area Code, *Public Notice*, NSD File No. L-99-36, DA 99-929 (rel. May 14, 1999) (California Petition). Pleadings filed in response to these public notices will be incorporated into the record for this proceeding.

[385] *See* Common Carrier Bureau Seeks Comment on a Petition of the California Public Utilities Commission and the People of the State of California for Delegation of Additional Authority Pertaining to Area Code Relief and to NXX Code Conservation Measures, *Public Notice*, NSD File No. L-98-136, DA 99-928 (rel. May 14, 1999); Common Carrier Bureau Seeks Comment on the Florida Public Service Commission's Petition for Authority to Implement Number Conservation Measures, *Public Notice*, NSD File No. L-99-33, DA 99-725 (rel. April 15, 1999); Common Carrier Bureau Seeks Comment on the Maine Public Utilities Commission's Petition for Additional Authority to Implement Number Conservation Measures, *Public Notice*, NSD File No. L-99-27, DA 99-638 (rel. April 1, 1999); Common Carrier Bureau Seeks Comment on Massachusetts Department of Telecommunications and Energy Request for Additional Authority to Implement Various Area Code Conservation Methods in the 508, 617, 781, and 978 Area Codes, *Public Notice*, NSD File No. L-99-19, DA 99-461 (rel. March 5, 1999); Common Carrier Bureau Seeks Comment on New York Department of Public Service Petition for Additional Authority to Implement Number Conservation Methods, *Public Notice*, NSD File No. L-99-21, DA 99-462 (rel. March 5, 1999); Common Carrier Bureau Seeks Comment on a Petition of the California Public Utilities Commission and the People of the State of California for an Additional Delegation of Authority to Conduct NXX Code Rationing, *Public Notice*, NSD File No. L-98-136, DA 99-108 (rel. Jan. 6, 1999). These petitions for additional authority will be addressed in separate proceedings.

of consumers, and should not unduly favor one technology over another. In applying these principles, the Commission specifically prohibited technology-specific or service-specific overlays and required that all-services overlays be accompanied by implementation of mandatory ten-digit dialing.[386]

247. In this section, we seek comment on whether the Commission, to facilitate the maximum optimization of numbering resources, should amend its existing guidelines or develop additional guidelines for area code relief. First, we seek comment on the advantages and disadvantages of geographic splits, the approach most commonly used by states to accomplish area code relief.[387] Second, we seek comment on whether area code overlays may be preferable to geographic splits from a numbering resource optimization perspective, and whether the Commission should consider modifying the conditions it has imposed on the use of all-services overlays. Third, we seek comment on whether we should reexamine our prohibition of service-specific or technology-specific overlays, and whether there may be numbering resource optimization benefits that warrant modifying or lifting this prohibition under some circumstances.

248. *Geographic Splits.* In most cases, states create new area codes through the implementation of geographic splits. The NANC Report identified a number of advantages of a geographic split as a measure of area code relief, including the following: customers will be able to associate an NPA with a unique geographic area; any given customers' premises will be served by one NPA; customers maintain intra-NPA seven-digit dialing; and equal availability of unassigned NXXs in both the new and the old NPA to all industry segments.[388] The NANC Report also identified a number of disadvantages of a geographic split as a measure of area code relief.[389] First, geographic splits require approximately half of the subscribers in the existing NPA to change to the new NPA. As a result, these subscribers may incur additional costs, including disruption to users due to the need for reprogramming CPE and changes made to stationary and advertising. Second, because geographic splits require approximately half of the subscribers in the existing NPA to change to a new NPA, successive geographic splits would create substantial costs for subscribers, thus increasing the consequences associated with inaccurately forecasting growth versus non-growth areas.

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[386] *Local Competition Second Report and Order*, 11 FCC Rcd at 19518.

[387] *See* NPA Relief Activities, *supra* note 200 (indicating that of approximately 100 recent and pending area code relief activities, 80 are or will be splits).

[388] NANC Report at § 14.

[389] NANC Report at § 14.

249. We seek comment on the advantages and disadvantages of geographic splits relative to other methods of area code relief from a numbering optimization perspective. We also seek comment on whether there is a need for additional rules or guidelines at the federal level with respect to the implementation of geographic splits by state authorities. For example, if a split has recently been implemented, should there be any limitations or conditions on implementing another split as opposed to an overlay in the same area within a certain time frame? Are there other circumstances in which limitations or conditions on splits might be warranted such as following rate center consolidations, rollout of service provider number portability, or implementation of number pooling in an NPA? Alternatively, should we direct that the implementation of splits be accompanied by other numbering optimization initiatives to ensure that numbering resources in both the new and the pre-existing area code are used efficiently? If so, which of the methods discussed in previous sections are most suitable?

250. *All-Services Overlays.* The NANC Report identified a number of advantages of all-services overlays as a method of area code relief.[390] First, from a numbering optimization perspective, an all-service overlay creates a new numbering resource that is available for use throughout the entire geographic area covered by the old NPA code. As a result, the consequences associated with inaccurately forecasting growth versus non-growth areas may be reduced. Second, because overlays only affect the assignment of new numbers, existing consumers are not required to change their telephone numbers. This advantage is particularly significant in areas where there is a need for frequent area code relief because subsequent prospective all-services overlays can also be implemented without requiring existing consumers to change their telephone numbers.

251. The NANC Report also identified a number of disadvantages of all-services overlays.[391] First, customers must use ten-digit dialing for calls in their own area, both to call numbers that use the overlay area code and, pursuant to the Commission's mandate, to call numbers within their own area code.[392] Thus, although an overlay does not require existing customers to change their own telephone numbers, it leads to additional costs associated with ten-digit dialing and it reduces the ability of customers to identify geographic areas with specific NPAs.[393] Second, if an all-services overlay is implemented on a prospective basis (i.e., no existing customers are reassigned to the new NPA), it does not free up new

[390] NANC Report at § 12.1.

[391] NANC Report at § 12.1.

[392] *Local Competition Second Report and Order*, 11 FCC Rcd at 19518.

[393] NANC Report at § 12.1.

numbering resources within the existing NPA. Thus, new entrants in a market are less likely to be able to obtain numbers in the existing NPA, and therefore may be less able to compete effectively against incumbents for customers desiring numbers in the existing NPA. The introduction of LNP, however, may mitigate the disadvantage to new entrants, because customers with numbers in the pre-overlay NPA will have the option of porting their numbers if they elect to obtain service from a new competitor.

252. We seek comment on the advantages and disadvantages of all-services overlays relative to other methods of area code relief from a numbering resource optimization perspective. In particular, we seek comment on the cost of implementing all-services overlays relative to other methods of area code relief and how this cost varies depending on whether the overlay is implemented on a prospective basis and whether other overlays have previously been implemented for the relevant area. We also seek comment on whether there is a need to modify our existing guidelines with respect to the implementation of all-services overlays. For example, should we retain the requirements concerning ten-digit dialing or are there numbering resource optimization benefits that would justify allowing states to implement overlays without this condition? Also, as in the case of geographic splits, commenters should address whether the implementation of overlays should be accompanied by other numbering resource optimization initiatives to ensure that numbering resources in both the new and the pre-existing area code are used efficiently. We also seek comment on the relative impact of splits versus overlays on the deployment and potential benefits of LNP. For example, if the geographic area covered by an NPA is reduced because of a split, could this reduce opportunities for customers to port their numbers that would have existed otherwise?

253. Another possible overlay option is the use of so-called "reverse" overlays, which involve the creation of a single area served by two or more existing NPAs when a previously established NPA boundary is eliminated. For example, the Public Utility Commission of Texas has deployed reverse overlays in the Dallas area (214/972) and the Houston area (713/281).[394] The NANC Report notes that such an overlay plan can be especially useful in areas where the NPAs from the previous split are exhausting unevenly and relief is necessary in one but not the other.[395] We seek comment on this alternative.

254. We also seek comment on how the size of an all-services overlay area would affect the advantages and disadvantages discussed above. Although all overlay area codes

[394] *See* Public Utility Commission of Texas Petition for Expedited Waiver of 47 C.F.R. Section 52.19(c)(3)(ii) for Area Code Relief, *Order*, 13 FCC Rcd 21798 (Com. Car. Bur. 1998) (granting the Texas Commission a waiver of the ten-digit dialing requirement in section 52.19(c)(3)(ii) for a period not to exceed six months from the date of implementation of the reverse overlays).

[395] NANC Report at § 12.2.

implemented to date have used the same geographic boundaries as the underlying area codes, there is no requirement that they be limited in this respect. For example, the NANC Report identifies an "expanded NPA overlay" proposal that would implement an overlay covering a region that is larger than an existing NPA.[396] Potentially, use of such expanded overlay area codes could have significant numbering resource optimization benefits, because it would allow for use of a single area code to provide relief to multiple existing codes. Moreover, allocating new numbering resources over a larger geographic region than existing NPAs would give states enhanced flexibility to accommodate demand for numbers in high-growth areas that may not correspond to existing area code boundaries. Creation of expanded area codes would also raise complex rating and billing issues, however, because the overlay NPA would have a larger calling area than the underlying NPAs it overlaps.

255. We seek comment on the feasibility of expanded area overlays as a means of allocating new numbering resources to areas facing exhaust of existing NPAs. In particular, we seek comment on the practicality of this approach in light of its potential effect on rating and billing of calls between the overlay NPA and underlying NPAs. We also seek comment on whether there are any practical limits to the size of overlay NPAs. For example, should we consider the possibility of regional NPAs that cover NPAs in multiple states, or even national NPAs established for overlay purposes? If we were to consider this approach, should the Commission assume responsibility for implementation of such codes, or should it delegate authority to the states to enter into agreements with one another for purposes of establishing multi-state overlay area codes?

256. *Service-Specific and Technology-Specific Overlays*. As noted above, the Commission has prohibited service-specific and technology-specific overlays, initially in the *Ameritech Order* and then more broadly in the *Local Competition Second Report and Order*. In the *Ameritech Order*, we rejected a wireless-only overlay plan proposed by Ameritech for the 708 area code on the grounds that it would be unreasonably discriminatory and would unduly inhibit competition. Specifically, we were concerned about several facets of Ameritech's area code relief plan: the proposal to continue assigning 708 numbers to wireline carriers but to exclude paging and cellular carriers from such assignments; the proposal to require paging and cellular carriers to take back 708 numbers previously assigned to their subscribers, while wireline carriers would not be required to do so; and the proposal to assign all numbers to paging and cellular carriers exclusively from the existing 312 and the new 630 area codes, while wireline carriers (and perhaps others) would continue to receive 708

[396] NANC Report at § 12.3. We also note that the Georgia Public Service Commission implemented an expanded NPA overlay for the 770 and 404 NPAs in Atlanta. *See* North American Numbering Plan Planning Letter, PL-NANP-102, Nov. 21, 1997. This document is available at <http://www.nanpa.com>.

numbers.[397] We found that Ameritech's plan would place paging and cellular companies at a distinct competitive disadvantage because their customers would suffer the cost and inconvenience of having to surrender existing numbers and go through the process of reprogramming their equipment, changing over to new numbers, and informing callers of their new numbers.[398] We also found that any numbering resource optimization benefits from this plan were outweighed by the disproportionate burden that the plan would place on paging and cellular carriers.[399]

257. We continue to believe that service-specific or technology-specific overlays raise serious competitive issues that must be carefully considered for the reasons stated in our prior orders. Nonetheless, in light of the increased urgency of the numbering crisis and the broader issues raised in this proceeding, we believe it is appropriate at least to reexamine our policies with respect to service-specific and technology-specific overlays, and to consider whether we should modify or lift the restriction on these area code relief methods. Do technology-specific and service-specific overlays yield potential numbering resource optimization benefits that would not also result from implementation of an all-services overlay? To what extent would concerns about the discriminatory impact of service or technology-specific overlays be mitigated if such overlays were prospective only and did not involve the taking back of numbers from existing customers? Commenters should also address whether technology-specific and service-specific overlays could yield potential new benefits that were not previously contemplated. For example, in the event that the wireless industry were to move to "calling party pays" (CPP) as a pricing option,[400] could use of wireless-specific area codes provide a means to notify wireline customers that they are making a chargeable call to a wireless number?

258. We also seek comment on whether there are particular services or technologies that could be assigned numbers from a technology or service-specific overlay code without raising the competitive concerns that we cited with respect to Ameritech's wireless-overlay proposal. In their respective petitions, Connecticut and Massachusetts argue that service-

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[397] *Ameritech Order*, 10 FCC Rcd at 4605, 4607-09, 4610-12.

[398] *Ameritech Order*, 10 FCC Rcd at 4608.

[399] *Ameritech Order*, 10 FCC Rcd at 4608.

[400] *See generally* Calling Party Pays Service Option in the Commercial Mobile Radio Services, *Notice of Inquiry*, WT Docket No. 97-207, 12 FCC Rcd. 17693 (1997) (initiating an inquiry to explore the subject of calling party pays (CPP) in order to develop a record for determining whether the wider availability of CPP would enable CMRS providers to compete more readily with wireline services provided by LECs, and for determining whether there are actions that the Commission could take to promote the wider availability of CPP for CMRS providers).

specific or technology-specific overlays would not produce anti-competitive effects if there is no existing or likely competition between the industry segment using the service/technology that is targeted by the overlay and the industry segment using the service/technology that is unaffected by the overlay.[401] We seek comment on this assertion, and on what non-competing services or technologies, if any, would meet this standard.

259. We further seek comment on how a technology-specific or service-specific overlay could be implemented in a manner that would promote our number optimization objectives. Because wireless carriers often require, on average, fewer NXXs than wireline carriers to serve the same size geographic footprint, technology-specific or service-specific overlays that cover the same geographic scope as pre-existing NPAs might decrease, rather than increase, the efficiency with which numbering resources are used. These circumscribed service-specific overlays would provide wireless carriers serving the area with many more NXX codes than they need, which would, at the same time, be unavailable to wireline carriers that need them. Therefore, we seek comment on whether technology-specific or service-specific overlays should only be implemented on an expanded or regional basis.

260. We also seek comment on the relationship between technology-specific or service-specific overlays and other numbering resource optimization methods discussed above, such as number pooling. For example, if we were to adopt pooling requirements for LNP-capable carriers, should we consider allowing the creation of overlay area codes specifically for carriers that are not LNP-capable? Arguably, this would ensure that non-LNP capable carriers continue to have access to numbering resources in markets where existing area codes are in jeopardy, while increasing the potential availability for pooling of codes in existing NPAs. On the other hand, segregating LNP-capable and non-LNP capable carriers by area code assignment could have a discriminatory impact on users of the overlay code, and could inhibit the ability of non-LNP capable carriers to compete with LNP-capable carriers. We seek comment on the relative costs and benefits of this alternative.

261. Finally, to the extent that we consider any modification of our prohibition on service-specific and technology-specific overlays, we seek comment on whether we should consider exceptions to the current prohibition on a case-by-case basis or whether we should adopt general rules and guidelines. We also seek comment on whether we should address requests for service-specific and technology-specific overlays at the federal level, or whether we should delegate authority to the states to establish service-specific and technology-specific overlays within federal rules or guidelines.

[401] Connecticut Petition at 10-11; Massachusetts Petition at 5.

VIII. PROCEDURAL MATTERS

A. *Ex Parte* Presentations

262. This matter shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.[402] Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented is generally required.[403]

B. Initial Paperwork Reduction Act Analysis

263. This Notice of Proposed Rulemaking (Notice) contains either a proposed or modified information collection. As part of its continuing effort to reduce paperwork burdens, we invite the general public and the Office of Management and Budget (OMB) to take this opportunity to comment on the information collections contained in this Notice, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. Public and agency comments are due at the same time as other comments on this Notice; OMB comments are due 60 days from date of publication of this Notice in the Federal Register. Comments should address: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology.

C. Initial Regulatory Flexibility Act Analysis

264. Pursuant to the Regulatory Flexibility Act (RFA),[404] the Commission has prepared the following Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules in this Notice. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments on the rest of the Notice, and should have a

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[402] *See* Amendment of 47 C.F.R. 1.1200 et seq. Concerning Ex Parte Presentations in Commission Proceedings, *Report and Order*, 12 FCC Rcd 7348, 7356-57 (1997) (citing 47 C.F.R. 1.1204(b)(1)).

[403] *See* 47 C.F.R. § 1.1206(b)(2), as revised.

[404] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601 *et seq.*, was amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

separate and distinct heading designating them as responses to the IRFA. The Commission shall send a copy of this Notice, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with the RFA.[405]

265. *Need for and Objectives of the Proposed Rules.* The Commission is issuing this Notice to seek public comment on how best to create national standards for numbering resource optimization. In doing so, we seek to: (1) ensure sufficient access to numbering resources for all service providers that need them to enter into or to compete in telecommunications markets; (2) avoid, or at least delay, exhaust of the NANP and the need to expand the NANP; (3) minimize the negative impact on consumers; (4) impose the least cost possible, in a competitively neutral manner, while obtaining the highest benefit; (5) ensure that no class of carrier or consumer is unduly favored or disfavored by our numbering resource optimization efforts; and (6) minimize the incentives for building and carrying excessively large inventories of numbers.

266. *Legal Basis.* The proposed action is authorized under sections 1, 4(i) and (j), 201, 208, and 251 of the Communications Act of 1934, as amended.[406]

267. *Description and Estimate of the Number of Small Entities That May Be Affected by this Notice.* The RFA requires that an initial regulatory flexibility analysis be prepared for notice-and-comment rulemaking proceedings, unless the agency certifies that "the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities."[407] The RFA generally defines "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[408] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[409] A small business concern is one which: (1) is

[405] 5 U.S.C. § 603(a)

[406] 47 U.S.C. §§ 151, 154(i), 154(j), 201, and 251(e).

[407] 5 U.S.C. § 605(b).

[408] *Id.* § 601(6).

[409] *Id.* § 601(3) (incorporating by reference the definition of "small business concern" in Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."

independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).[410]

268. In this IRFA, we consider the potential impact of this Notice on all users of telephone numbering resources. The small entities possibly affected by the proposed rules, if adopted, include wireline, wireless, and other entities, as described below. The SBA has defined a small business for Standard Industrial Classification (SIC) categories 4,812 (Radiotelephone Communications) and 4,813 (Telephone Communications, Except Radiotelephone) to be small entities having no more than 1,500 employees.[411] In the FRFA to the *Universal Service Order*, we described and estimated in detail the number of small entities that would be affected by the new universal service rules.[412] Although some affected incumbent local exchange carriers (ILECs) may have 1,500 or fewer employees, we do not believe that such entities should be considered small entities within the meaning of the RFA because they are either dominant in their field of operations or are not independently owned and operated, and therefore by definition not "small entities" or "small business concerns" under the RFA. Accordingly, our use of the terms "small entities" and "small businesses" does not encompass small ILECs. Out of an abundance of caution, however, for regulatory flexibility analysis purposes, we will separately consider small ILECs within this analysis and use the term "small ILECs" to refer to any ILECs that arguably might be defined by the SBA as "small business concerns."[413]

269. The most reliable source of information regarding the total numbers of certain common carrier and related providers nationwide, as well as the numbers of commercial wireless entities, appears to be data the Commission publishes annually in its *Carrier Locator: Interstate Service Providers Report (Locator)*.[414] These carriers include, *inter alia*, local exchange carriers, competitive local exchange carriers, interexchange carriers,

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[410] Small Business Act, 15 U.S.C. § 632.

[411] 13 C.F.R. § 121.201.

[412] Federal-State Joint Board on Universal Service, *Report and Order*, CC Docket No. 96-45, 12 FCC Rcd 8776, 9227-9243 (1997) (*Universal Service Order*), as corrected by Federal-State Joint Board on Universal Service, *Erratum*, CC Docket No. 96-45, FCC 97-157 (rel. June 4, 1997), *appeal pending sub nom. Texas Office of Public Utility Counsel v. FCC and USA*, No. 97-60421 (5th Cir. 1997).

[413] *See* 13 C.F.R. § 121.201, SIC code 4813. Since the time of the *Local Competition* decision, 11 FCC Rcd 15499, 16144-45 (1996), 61 FR 45476 (Aug. 29, 1996), the Commission has consistently addressed in its regulatory flexibility analyses the impact of its rules on such ILECs.

[414] FCC, Carrier Locator: Interstate Service Providers at 1-2. This report lists 3,604 companies that provided interstate telecommunications service as of December 31, 1997 and was compiled using information from Telecommunications Relay Service (TRS) Fund Worksheets filed by carriers (Jan. 1999).

competitive access providers, satellite service providers, wireless telephony providers, operator service providers, pay telephone operators, providers of telephone toll service, providers of telephone exchange service, and resellers.

270. *Total Number of Companies Affected.* The U.S. Bureau of the Census (Census Bureau) reports that, at the end of 1992, there were 3,497 firms engaged in providing telephone services, as defined therein, for at least one year.[415] This number contains a variety of different categories of carriers, including local exchange carriers, interexchange carriers, competitive access providers, cellular carriers, mobile service carriers, operator service providers, pay telephone operators, personal communications services providers, covered specialized mobile radio providers, and resellers. It seems certain that some of those 3,497 telephone service firms may not qualify as small entities or small ILECs because they are not "independently owned and operated."[416] For example, a PCS provider that is affiliated with an interexchange carrier having more than 1,500 employees would not meet the definition of a small business. It is reasonable to conclude that fewer than 3,497 telephone service firms are small entity telephone service firms or small ILECs that may be affected by the proposed rules, if adopted.

271. *Local Service Providers.* There are two principle providers of local telephone service; ILECS and competing local service providers. Neither the Commission nor the SBA has developed a definition for small providers of local exchange services (LECs). The closest applicable definition under the SBA rules is for telephone communications companies other than radiotelephone (wireless) companies.[417] According to data set forth in the *FCC Statistics of Communications Common Carriers* (*SOCC*), 34 ILECs have more than 1,500 employees.[418] We do not have data specifying the number of these carriers that are either dominant in their field of operations or are not independently owned and operated, and thus are unable at this time to estimate with greater precision the number of ILECs that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that fewer than 1,376 ILECs are small entities that may be affected by the proposed rules, if adopted.

272. *Competitive Local Service Providers.* This category includes competitive access providers (CAPs), competitive local exchange providers (CLECs), shared tenant service

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[415] U.S. Department of Commerce, Bureau of the Census, *1992 Census of Transportation, Communications, and Utilities: Establishment and Firm Size*, at Firm Size 1-123 (1995) (*1992 Census*).

[416] *See generally* 15 U.S.C. § 632(a)(1).

[417] *Id.*

[418] *SOCC* at Table 2.9.

providers, local resellers, and other local service providers. Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to competitive local service providers. The closest applicable definition under the SBA rules is for telephone communications companies other than radiotelephone (wireless) companies.[419] According to the most recent *Locator* data, 145 carriers reported that they were engaged in the provision of competitive local service.[420] We do not have data specifying the number of these carriers that are not independently owned or operated, and thus are unable at this time to estimate with greater precision the number of competitive local service providers that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are fewer than 145 small entity competitive local service providers that may be affected by the proposed rules, if adopted.

273. *Providers of Toll Service.* The toll industry includes providers of interexchange services (IXCs), satellite service providers and other toll service providers, primarily resellers. Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to providers of toll service. The closest applicable definition under the SBA rules is for telephone communications companies other than radiotelephone (wireless) companies.[421] According to the most recent *Locator* data, 164 carriers reported that they were engaged in the provision of toll services.[422] We do not have data specifying the number of these carriers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of toll providers that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are fewer than 164 small entity toll providers that may be affected by the proposed rules, if adopted.

274. In addition, an alternative SBA standard may apply to satellite service providers. The applicable definition of small entity generally is the definition under the SBA rules applicable to Communications Services, Not Elsewhere Classified (NEC). This definition provides that a small entity is expressed as one with $11.0 million or less in annual receipts.[423] According to the Census Bureau, there were a total of 848 communications

[419] 13 C.F.R. § 121.201, SIC code 4813.

[420] *Locator* at 1-2

[421] 13 C.F.R. § 121.201, SIC code 4813.

[422] *Locator* at 1-2.

[423] 13 C.F.R. § 120.121, SIC code 4899.

services providers, NEC, in operation in 1992, and a total of 775 had annual receipts of less than $9,999 million.[424] The Census report does not provide more precise data.

275. *Resellers.* This category includes toll resellers, operator service providers, pre-paid calling card providers, and other toll service providers. Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to resellers. The closest applicable SBA definition for a reseller is a telephone communications company other than radiotelephone (wireless) companies.[425] According to the most recent *Locator* data, 405 carriers reported that they were engaged in the resale of telephone service.[426] We do not have data specifying the number of these carriers that are not independently owned or operated, and thus are unable at this time to estimate with greater precision the number of resellers that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are fewer than 405 small entity resellers that may be affected by the proposed rules, if adopted.

276. *Wireless Telephony and Paging and Messaging.* Wireless telephony includes cellular, personal communications service (PCS) or specialized mobile radio (SMR) service providers. Neither the Commission nor the SBA has developed a definition of small entities applicable to cellular licensees, or to providers of paging and messaging services. The closest applicable SBA definition for a reseller is a telephone communications company other than radiotelephone (wireless) companies.[427] According to the most recent *Locator* data, 732 carriers reported that they were engaged in the provision of wireless telephony and 137 companies reported that they were engaged in the provision of paging and messaging service.[428] We do not have data specifying the number of these carriers that are not independently owned or operated, and thus are unable at this time to estimate with greater precision the number that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that fewer than 732 carriers are engaged in the provision of wireless telephony and fewer than 137 companies are engaged in the provision of paging and messaging service.

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[424] *1992 Economic Census Industry and Enterprise Receipts Size Report*, Table 2D, SIC code 4899 (U.S. Bureau of the Census data under contract to the Office of Advocacy of the U.S. Small Business Administration).

[425] 13 C.F.R. § 121.201, SIC code 4813.

[426] *Locator* at 1-2.

[427] 13 C.F.R. § 121.201, SIC code 4813.

[428] *Locator* at 1-2.

277. The SBA has developed a definition of small entities for cable and other pay television services, which includes all such companies generating $11 million or less in revenue annually.[429] This definition includes cable systems operators, closed circuit television services, direct broadcast satellite services, multipoint distribution systems, satellite master antenna systems and subscription television services. According to the Census Bureau data from 1992, there were 1,788 total cable and other pay television services and 1,423 had less than $11 million in revenue.[430]

278. The Commission has developed its own definition of a small cable system operator for the purposes of rate regulation. Under the Commission's rules, a "small cable company" is one serving fewer than 400,000 subscribers nationwide.[431] Based on our most recent information, we estimate that there were 1,439 cable operators that qualified as small cable system operators at the end of 1995.[432] Since then, some of those companies may have grown to serve over 400,000 subscribers, and others may have been involved in transactions that caused them to be combined with other cable operators. Consequently, we estimate that there are fewer than 1,439 small entity cable system operators.

279. The Communications Act also contains a definition of a small cable system operator, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed $250,000,000."[433] The Commission has determined that there are 66,000,000 subscribers in the United States. Therefore, we found that an operator serving fewer than 660,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all of its affiliates, do not exceed $250 million in the aggregate.[434] Based on available data, we

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[429] 13 C.F.R. § 121.201, SIC code 4841.

[430] *1992 Economic Census Industry and Enterprise Receipts Size Report*, Table 2D, SIC code 4841 (U.S. Bureau of the Census data under contract to the Office of Advocacy of the U.S. Small Business Administration).

[431] 47 C.F.R. § 76.901(e). The Commission developed this definition based on its determination that a small cable system operator is one with annual revenues of $100 million or less. *Implementation of Sections of the 1992 Cable Act: Rate Regulation,* Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 7393 (1995), 60 FR 10534 (Feb. 27, 1995).

[432] Paul Kagan Associates, Inc., *Cable TV Investor*, Feb. 29, 1996 (based on figures for Dec. 30, 1995).

[433] 47 U.S.C. § 543(m)(2).

[434] 47 C.F.R. § 76.1403(b).

find that the number of cable operators serving 660,000 subscribers or less totals 1,450.[435] We do not request nor do we collect information concerning whether cable system operators are affiliated with entities whose gross annual revenues exceed $250,000,000,[436] and thus are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act. It should be further noted that recent industry estimates project that there will be a total of 66,000,000 subscribers, and we have based our fee revenue estimates on that figure.

280. *Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements. See* paragraph 263, for an initial Paperwork Reduction Act analysis. This Notice proposes the following information collection: The Notice seeks comment on whether all NXX codeholders should be required to report the status of all telephone numbers within the NXX blocks assigned to them. In the alternative, the Notice seeks comment on whether utilization data reporting on a more aggregated basis (or some more aggregated set of telephone number status categories) would provide sufficient data to accurately track number utilization. The Notice proposes that any utilization reporting obligation that the Commission adopts would be in addition to the demand forecasting requirement that the COCUS currently places on carriers. The Notice seeks comment on whether any modifications should be made to improve the quality and accuracy of carriers' demand forecasts. Alternatively, the Notice seeks comment on several alternative data collection options, including the forecast and utilization reporting process in the current Thousand Block Pooling Guidelines, and the Line Number Use Survey (LINUS) data collection model designed by NANPA staff as a replacement for COCUS. The Notice also seeks comment on other industry proposals for a number utilization and forecasting mechanism to replace COCUS. Finally, it seeks comment on whether to supplement the need verification measures and data collection program with a comprehensive audit program that verifies carrier compliance with federal rules and industry numbering guidelines.

281. *Steps taken to Minimize Significant Economic Impact on Small Entities and Significant Alternatives Considered.* The rules we propose in this Notice are designed to ensure sufficient access to numbering resources for all service providers that need them. The Notice seeks public comment on how best to create national standards for numbering resource optimization in order to: (1) ensure sufficient access to numbering resources for all service providers that need them to enter into or to compete in telecommunications markets; (2)

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[435] Paul Kagan Associates, Inc., *Cable TV Investor, supra.*

[436] We do receive such information on a case-by-case basis only if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to section 76.1403(b) of the Commission's rules. *See* 47 C.F.R. § 76.1403(d).

avoid, or at least delay, exhaust of the NANP and the need to expand the NANP; (3) minimize the negative impact on consumers; (4) impose the least cost possible, in a competitively neutral manner, while obtaining the highest benefit; (5) ensure that no class of carrier or consumer is unduly favored or disfavored by our optimization efforts; and (6) minimize the incentives for carriers to build and carry excessively large inventories of numbers. We seek comment on our tentative conclusions and proposals, and on additional actions we might take in this regard to relieve burdens on users of telephone numbering resources.

282. *Federal Rules That May Duplicate, Overlap, or Conflict With the Proposed Rules.* None.

D. Comment Filing Procedures

283. Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on or before **July 30, 1999** and reply comments on or before **August 30, 1999**. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies. *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24,121 (1998). Comments filed through the ECFS can be sent as an electronic file via the Internet to <http://www.fcc.gov/e-file/ecfs.html>. Generally, only one copy of an electronic submission must be filed. In completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and the applicable docket or rulemaking number, which in this instance is CC Docket No. 99-200. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form <your e-mail address." A sample form and directions will be sent in reply.

284. Parties who choose to file by paper must file an original and four copies of each filing. All filings must be sent to the Commission's Secretary, Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, 445 Twelfth Street, S.W. Room TW-B204F, Washington, D.C. 20554.

285. Written comments by the public on the proposed information collections are due by July 30, 1999. Written comments must be submitted by the Office of Management and Budget (OMB) on the proposed and/or modified information collections on or before 60 days after date of publication in the Federal Register. In addition to filing comments with the Secretary, a copy of any comments on the information collections contained herein should be submitted to Judy Boley, Federal Communications Commission, Room 1-C804, 445 12th Street, S.W., Washington, D.C. 20554, or via the Internet to jboley@fcc.gov and to Timothy

Fain, OMB Desk Officer, 10236 NEOB, 725 - 17th Street, N.W., Washington, D.C. 20503 or via the Internet to fain_t@al.eop.gov.

286. Parties who choose to file by paper should also submit their comments on diskette. These diskettes should be submitted to Alvin McCloud, Common Carrier Bureau, Network Services Division, 445 Twelfth Street, S.W., Room 6-A423, Washington, D.C. 20554. Such a submission should be on a 3.5 inch diskette formatted in an IBM compatible format using WordPerfect 5.1 for Windows or compatible software. The diskette should be accompanied by a cover letter and should be submitted in "read only" mode. The diskette should be clearly labelled with the commenter's name, proceeding (including the docket number), type of pleading (comment or reply comment), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase "Disk Copy - Not an Original." Each diskette should contain only one party's pleading, preferably in a single electronic file. In addition, commenters must send diskette copies to the Commission's copy contractor, International Transcription Service, Inc., **1231 20th Street, N.W., Washington, D.C. 20037.**

287. Regardless of whether parties choose to file electronically or by paper, parties should also file one copy of any documents filed in this docket with the Commission's copy contractor, International Transcription Services, Inc., **1231 20th Street, N.W., Washington, D.C. 20036.** Comments and reply comments will be available for public inspection during regular business hours in the **FCC Reference Center, 445 12th Street, S.W., Washington, D.C. 20554.**

288. Comments and reply comments must include a short and concise summary of the substantive arguments raised in the pleading. Comments and reply comments must also comply with section 1.49 and all other applicable sections of the Commission's rules.[437] We also direct all interested parties to include the name of the filing party and the date of the filing on each page of their comments and reply comments. All parties are encouraged to utilize a table of contents, regardless of the length of their submission.

[437] *See* 47 C.F.R. § 1.49.

IX. ORDERING CLAUSES

289. Accordingly, IT IS ORDERED that pursuant to Sections 1, 3, 4, 201-205, 251 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 153, 154, 201-205, and 251 this NOTICE OF PROPOSED RULEMAKING is hereby ADOPTED.

290. IT IS FURTHER ORDERED that the Commission's Office of Public Affairs, Reference Operations Division, shall send a copy of this NOTICE OF PROPOSED RULEMAKING, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration, in accordance with section 603(a) of the Regulatory Flexibility Act, 5 U.S.C. §§ 602 *et seq.* (1981).

FEDERAL COMMUNICATION COMMISSION

Magalie Roman Salas
Secretary

Appendix A

Comments on the NANC Report were received from 49 entities:

AirTouch Communications, Inc. (AirTouch)
Allegiance Telecom, Inc. (Allegiance)
American Cellular Corporation
Ameritech
Association for Local Telecommunications Services (ALTS)
AT&T Corporation (AT&T)
Bell Atlantic
Bell Atlantic Mobile, Inc. (Bell Atlantic Mobile)
BellSouth Corporation (BellSouth)
California Public Utilities Commission and the People of the State of California
Cellular Telecommunications Industry Association (CTIA)
Colorado Public Utilities Commission
Commonwealth of Virginia, State Corporation Commission, Division of Communications
Communications Venture Services, Inc. and Richard Bartel (CVSI)
Cox Communications, Inc. (Cox)
Dr. Richard Levine
Florida Public Service Commission
GTE Service Corporation (GTE)
Joint Comments (filed by Centennial Cellular Corporation, CenturyTel Wireless, Inc., RFB Cellular, Inc., Thumb Cellular Limited Partnership, and Trillium Cellular Corporation)
Kentucky Public Service Commission
Lincoln Madison, LincMad.Com Consulting (Madison)
Maine Public Utilities Commission
MCI WorldCom, Inc. (MCI WorldCom)
MediaOne Group, Inc. (MediaOne)
National Association of State Utility Consumer Advocates (NASUCA)
National Emergency Number Association (NENA)
New Hampshire Public Utilities Commission
New York State Department of Public Service
Nextel Communications, Inc. (Nextel)
Nextlink Communications and Cablevision Lightpath, Inc. (Nextlink)
North Carolina Utilities Commission
Organization for the Promotion and Advancement of Small Telecommunications Companies (OPASTCO)
Paging Network, Inc. (PageNet)
Pennsylvania Public Utility Commission
Personal Communications Industry Association (PCIA)
PrimeCo Personal Communications, L.P. (PrimeCo)
Public Utilities Commission of Ohio
Public Utility Commission of Texas

RCN Telecom Services, Inc. (RCN)
SBC Communications, Inc. (SBC)
Sprint Corporation (Sprint)
Telco Year 2000 Forum
Telecommunications Resellers Association (TRA)
Teligent, Inc. (Teligent)
Texas Advisory Commission on State Emergency Communications and Texas Emergency Communications Districts
Unified Dialing Plan for Overlays, Gilbert Yablon
United States Telephone Association (USTA)
U S West Communications, Inc. (U S West)
Vanguard Cellular Systems, Inc. (Vanguard)

May 27, 1999

Separate Statement of Commissioner Gloria Tristani

Re: Numbering Resource Optimization. CC Docket No. 99-200

This Notice represents an important first step towards promoting efficient number utilization and creating standards for number optimization. The advent of new services using our nationwide numbering scheme, the entry of new competitors in the telecommunications market, the explosive growth of customer demand for telephone lines to support additional services, and the inefficient use of numbers all have contributed to a tremendous strain on our nation's numbering resources.

For some states, this problem has reached crisis proportions. Illustrating the rapid pace of area code exhaust, the California Public Utilities Commission projects that by the end of 2002, California will have 41 area codes. At the end of 1992, the state had only 13 area codes in use. In April, the California Public Utilities Commission reported that it had approved 7 new area codes in the previous 10 months. In one instance, immediately after the area code split was completed, the code administrator declared the new area code in jeopardy of exhausting its numbering resources.[1]

The Commission must act expeditiously to relieve the burden not only on the state commissions developing area code relief plans but most importantly on consumers, who face enormous costs and inconvenience each time area code relief is implemented. The carriers that serve these consumers have a vital role to play in forging solutions to promote efficient allocation and use of numbering resources. Accordingly, I urge telecommunications carriers and state commissions alike to participate in this proceeding to help craft a solution that will prevent the exhaust of our North American Numbering Plan.

[1] *See* Briefing on Numbering Issues, California Public Utilities Commission, April 1999.